Amendments to the Claims:

Please cancel claims 1-6 and 10 as follows. Please amend claims 1, 7, and 15 as follows. This listing of claims replaces all prior versions, and listings, of claims in the application.

Listing of claims:

1. - 6. (Canceled)

7. (Currently Amended) A method for controlling packet flow, comprising:

determining priority data of a packet received by one of a plurality of ports, wherein the priority data are determined by:

determining whether the priority data are designated to the one of the plurality of ports at which the packet is received or whether the priority data are designated to the packet and by outputting a first signal when the priority data is designated to the one of the plurality of ports at which the packet is received and a second signal when the priority data is not designated to the one of the plurality of ports at which the packet is received;

determining whether the packet is a VLAN packet or an IP packet when the priority data is designated to the packet; and

determining a priority by reading a priority field data of the VLAN packet or the IP packet and by outputting a third signal when the priority of the VLAN packet or the IP packet is over a predetermined critical value and outputting a fourth signal when the priority of the VLAN packet or the IP packet is under the predetermined critical value in the case where the priority data is designated to the VLAN packet or the IP packet;

measuring bandwidth data of each port;

outputting state data of each port of the plurality of ports by using the priority data and the bandwidth data;

determining whether an address pointer of a packet memory exceeds a predetermined limit value by monitoring the packet memory;

selecting at least one port of the plurality of ports to control packet flow by using the state data when the address pointer of the packet memory exceeds the predetermined limit value; and

directing the selected at least one port to control the packet flow.

8. (Previously Presented) The method of claim 7, wherein the bandwidth data are measured by:

counting the number of packets received by the one of the plurality of ports at which the packet is received;

calculating an average bandwidth by dividing the number of packets by a predetermined time period; and

outputting a first signal when the average bandwidth exceeds a predetermined critical value and a second signal when the average bandwidth does not exceed the predetermined critical value.

9. (Canceled)

10. (Canceled)

11. (Original) The method of claim 7, wherein when outputting state data, an OR operation of a signal resulting from the priority determination and a signal related to the bandwidth are output.

12. (Original) The method of claim 7, wherein when outputting state data, an AND operation of a signal resulting from the priority determination and a signal related to the bandwidth are output.

13. (Previously Presented) The method of claim 7, wherein the at least one port is selected by:

selecting all ports of which state output data are first state among the plurality of ports

when the address pointer exceeds a first limit value; and

selecting all ports when the address pointer exceeds a second limit value that is higher than the first limit value.

14. (Previously Presented) The method of claim 11, wherein the at least one port is selected by:

selecting a subset of ports of which state output data are first state when the address pointer exceeds a first limit value;

selecting all ports of which state output data are first state and a subset of ports of which state output data are second state when the address pointer exceeds a second limit value that is higher than the first limit value; and

selecting all ports when the address pointer exceeds a third limit value that is higher than the second limit value.

15. (Currently Amended) A packet flow control device comprising:

a plurality of port control units being respectively coupled to a plurality of ports for determining priority data of a packet received by a port, wherein each of the plurality of port control units comprises:

a bandwidth control section for measuring bandwidth data of a port;

a priority outputting section for determining the priority data of a packet received by the port; wherein the priority outputting section comprises:

a priority data extracting section for determining whether the priority data are designated to the port or whether the priority data are designated to the packet and outputting a first signal when the priority data is designated to the one of the plurality of ports at which the packet is received and a second signal when the priority data is not designated to the one of the plurality of ports at which the packet is received, for determining whether the packet is a VLAN packet or an IP packet when the priority data is designated to the packet, and for determining the priority data by reading a priority field data of the VLAN packet or the IP packet;

a port priority outputting section for outputting a port priority data when the priority data is designated to the port;

a VLAN priority outputting section for determining the priority of the VLAN packet by using the read priority data when the priority data is designated to VLAN packet; and

an IP priority outputting section for determining the priority of the IP packet by using the read priority data when the priority data is designated to the IP packet, the priority outputting section further outputting a third signal when the priority of the VLAN packet or the IP packet is over a predetermined critical value and a fourth signal when the priority of the VLAN packet or the IP packet is under the predetermined critical value in the case where the priority data is designated to the VLAN packet or the IP packet; and

a flow control directing section for requesting a port to produce a flow control packet in response to a flow control signal for directing the flow control from said queue manager; and

a queue manager for monitoring a state of a packet memory, and for selecting at least one flow control port to direct flow control by using the priority data determined by the port control units when an address pointer of the packet memory exceeds a predetermined limit value.

16. (Canceled)

17. (Previously Presented) The packet flow control device of claim 15, wherein the bandwidth control section comprises:

a counter for counting the number of packets received by the port;

a bandwidth calculating section for calculating an average bandwidth by dividing the counted number by a predetermined time period; and

a comparing section for determining whether the average bandwidth exceeds a predetermined critical value.

18. (Canceled)

19. (Previously Presented) The packet flow control device of claim 15, wherein the queue manager comprises:

a limit value detecting section for detecting whether the address pointer exceeds the limit value;

a flow control determining section for directing the at least one flow control port in a predetermined state to control the packet flow when the address pointer exceeds the limit value;

a port state determining section for determining the state of the port by receiving output signal of the bandwidth control section and the priority outputting section; and

a flow control signal transmitting section for selecting the at least one flow control port in the predetermined state according to the data output by the port state determining section and transmitting a flow control signal to the port control unit of the selected at least one flow control port in response to a flow control direction of the flow control directing section.

20. (Original) The packet flow control device of claim 19, wherein the flow control signal transmitting section selects all ports having the low priority among the plurality of ports when the address pointer exceeds a first limit value, and selects all ports when the address pointer exceeds a second limit value that is higher than the first limit value.

21. (Original) The packet flow control device of claim 19, wherein the flow control signal transmitting section selects a subset of ports having the low priority when the address pointer exceeds a first limit value, selects all ports having the low priority and a subset of ports having the high priority when the address pointer exceeds a second limit value that is higher than the first limit value, and selects all ports when the address pointer exceeds a third limit value that is higher than the second limit value.

22. (Original) The packet flow control device of claim 19, wherein the bandwidth control section and the priority outputting section output a signal of high state or low state according to

the bandwidth and the priority, wherein the port state determining section determines the state of the port by performing OR operation of the output signals of the bandwidth control section and the priority outputting section.

23. (Previously Presented) The packet flow control device of claim 19, wherein the bandwidth control section and the priority outputting section output a signal of high state or low state according to the bandwidth and the priority, wherein the port state determining section determines the state of the port by performing an AND operation of the output signals of the bandwidth control section and the priority outputting section.

24. (Original) The packet flow control device of claim 22, wherein the flow control signal transmitting section selects all ports of which state data are a first signal from among the plurality of ports when the address pointer exceeds a first limit value, and selects all ports when the address pointer exceeds a second limit value that is higher than the first limit value.

25. (Previously Presented) The packet flow control device of claim 22, wherein the flow control signal transmitting section selects a subset of ports of which state data are a first signal when the address pointer exceeds a first limit value, selects all ports of which state data are a first signal and a subset of ports of which state data are a second signal when the address pointer exceeds a second limit value that is higher than the first limit value, and selects all ports when the address pointer exceeds a third limit value that is higher than the second limit value.